



**MAINLAND**  
MACHINERY

## CASE HISTORY: DROSS SPOONS



### A PROBLEM OF SUPPLY

One of BC's largest foundries needed a tool for skimming dross from molten metal while it's still in vats. These dross spoons needed to be reliable and durable enough to withstand extreme temperatures. They also needed a supplier that could adapt to fluctuations in demand throughout the year. Ultimately, our client needed a highly communicative supplier who could anticipate their needs and deliver on time.

### A FOUNDATION OF TRUST

Mainland Machinery has always been dedicated to establishing a foundation of trust with its customers and over the last 40 years has become an industry leader in supplying steel design and fabrication services across multiple industry sectors. Every project we undertake is treated with the utmost care and handled from concept to implementation by our expert team of engineers, production crew, and staff.



# QUALITY SOLUTIONS YOU CAN COUNT ON



Mainland Machinery prides ourselves on our ability to not only build top quality steel fabrication, but also on our ability to build strong, long-lasting, relationships with all of our customers. Regardless of scale or complexity, we work hand in hand with our customers to help them achieve their goals.

## SCALABLE SOLUTIONS

When challenged with upgrading a dross spoon, we worked with the foundry and combined innovation with excellence to bring a new level of quality to this everyday tool. Sustained by our principles of flexibility and timeliness, we developed a ceramic coating that improves its ability to withstand their work with molten metal, and brought a peace of mind to their longstanding supply problem. These deep-rooted practices enable Mainland to deliver product according to the client's actual needs, ensuring they never have too much or too little equipment on hand.

## EXTREME ENDURANCE

We worked with the client to create a ceramic coating that could provide chemical and thermal protection in high-temperature environments (1,400°C+), increasing the longevity of the tools themselves. The finished product is resistant to sticking and abrasion caused by liquid metal. Because of its anti-sticking properties and extreme durability, this coating has a multitude of potential applications.

### Properties of Ceramic Coating:

- Ability to withstand extreme temperatures and thermal shock
- Anti-sticking to protect against liquid metal and dross
- Protective barrier against corrosion and erosion caused by contact with liquid metal
- Thermal barrier to protect parts from liquid metal
- Dielectric properties

